

## Chapter 18

### *E-SUVIDHA – CHINCHWAD MUNICIPALITY, MAHARASHTRA*

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#### **I) OVERVIEW**

Pimpri Chinchwad Municipal Corporation (PCMC), an Urban Local Body (ULB) was formed in 1982 and was primarily an Industrial Hub. However after 2001, there was a spurge in the residential sector and the population of 10.06 lakhs during 2001 started increasing at the rate of 11% to reach 16 lakhs in 2010. The city is strategically located at 160 kms from India's financial center Mumbai and about 10 kms from one of the contry's major IT hubs, Pune. Pimpri Chinchwad which developed as a supporting township for Pune, has now emerged as an alternative in its own right with strong auto and auto-ancillary industries at its core.

The growth drivers of the city are slowly getting diversified and steadily shifting towards new clusters of Chakan, Hinjewadi, Talegaon and Talawade IT Park of Pune. As a growing city and considering changing requirements of the city, it was envisaged that major changes will be required in operation and management of its services. The vision formulated during 2007 was aimed at ensuring the economic development of the city along with improving the quality of life of the citizens of Pimpri-Chinchwad.

The important areas identified were:

- providing universal access of municipal services to the urban poor,
- improvement in the standard of education and providing an efficient civic administration.

To effectively realize this vision, PCMC has embarked on the development of an integrated e-Governance Program that will result in improved transparency, efficiency and will lead to building citizen centric governance. PCMC has not only proposed to deliver online services but has designed its initiative to reduce the citizen's footfalls in Corporation's offices.

PCMC is integrating and developing its entire operational system over e-Governance infrastructure. During the Phase I of the project the services where people interaction was substantial were targeted. During the phase II of the project which was initiated in January 2010, deals with bringing all internal operational activities of each individual department on e-Governance

platform and interlinking all the existing services and department for efficient information sharing and control. The phase I of the project has brought forth citizen centric services involving around eleven Corporation's departments. Currently PCMC is delivering following services online to its citizens:

- Property & Water Revenue Management
- e-Procurement
- Building Permission Management
- Dashboard for Works Management
- Grievances Management
- Solid Waste Management with Vehicle Tracking
- Online Birth and Death Certificate

Besides these, a major service towards management of health of the citizens on e-Governance platform is due for its launch on 12th October, 2010 and is termed as Citizen's Health Care Management System project. Providing Health Cards to citizens

## II) RESULT INDICATORS

### 1. Key Performance

#### a. Stakeholder services and benefits achieved through ICT interventions

<p><b>Property &amp; Water Revenue Management</b></p> <p>The services delivered by the system are</p> <ul style="list-style-type: none"> <li>• Citizens can view their bills online.</li> <li>• Web based access for the payment of Property tax and Water bills.</li> <li>• Easy Property Registration for tax assessment.</li> <li>• Provisional Tax and Notice generation.</li> <li>• Property Tax Assessment.</li> <li>• Collection received against bills is directly credited in bank account.</li> <li>• System automatically updates the bill amount paid.</li> <li>• Reports available for the paid and unpaid bills along with the</li> </ul>	<p><b>e-Procurement</b></p> <p>The services delivered by the system are</p> <ul style="list-style-type: none"> <li>• All the Departments publish their tenders online.</li> <li>• Bidders can view/download tenders online.</li> <li>• Bidders pay SD/EMD fees online.</li> <li>• Bidders bid online using digital signatures.</li> <li>• Tender-Committee can be defined per tender.</li> <li>• Tenders can only be opened by the tender committee using digital signatures online.</li> <li>• Generation of comparative statement as well as identification of L1.</li> <li>• Bidding Capacity and Tender limits are configurable with the Rate Contracts.</li> <li>• Facility to define multiple manufacturers</li> </ul>
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<p>pending and received amount.</p>	<p>for single item and bidders can bid for multiple manufacturers for single item.</p> <ul style="list-style-type: none"> <li>• Lowest financial bids (L1/L2) are published online to all bidders.</li> </ul>
<p><b>Building Permission Management</b> The services delivered by the system are</p> <ul style="list-style-type: none"> <li>• The AutoDCR system reads the drawing and extracts the geometrical information of layouts and building plans.</li> <li>• Single Window to get All N.O.C. The application is integrated internally with all departments.</li> <li>• Integrated with digital signature key – The applicant signs the application digitally and then it is encrypted.</li> <li>• Final detailed rules verification report is produced, indicating Passed/Failed status for each rule.</li> <li>• Permission status is available online to the applicant.</li> <li>• Escalation of Alerts on unnecessary delays.</li> </ul>	<p><b>Dashboard for Works Management</b> The services delivered by the system are</p> <ul style="list-style-type: none"> <li>• Every work has unique identification number generated by the system which is used for all modification and scrutiny.</li> <li>• Budget is loaded in the system as source of the works information.</li> <li>• At every stage the person who is in charge of that work needs to update its status.</li> <li>• It is linked to e-tendering application.</li> <li>• The work flows through various stages of approval.</li> <li>• Once it is approved and work order is issued it can be commenced.</li> <li>• Work in progress can be tracked for its completion, bills raised, payments made and funds allocation.</li> </ul>
<p><b>Grievance Management System</b> The services delivered by the system are</p> <ul style="list-style-type: none"> <li>• Web/sms based complaint launch.</li> <li>• Tracking of complaint status through token.</li> <li>• System generated alerts to concerned officer for pending complaints.</li> <li>• Alerts through sms/mail for update on complaints.</li> <li>• Alerts to higher level officer for delay in complaint resolution.</li> <li>• Daily status of addressed and pending complaints along with</li> </ul>	<p><b>Solid Waste Management with Vehicle Tracking</b> The services delivered by the system are</p> <ul style="list-style-type: none"> <li>• Bin wise service efficiency report</li> <li>• Route deviation specific alerts via SMS/email</li> <li>• Tracking of Vehicle being dispatched.</li> <li>• Tracking of no. of waste bins collected by vehicle.</li> <li>• Tracking of unloading at waste at land fill site</li> <li>• Vehicle stoppage time in various locations and breakdown.</li> </ul>

no. of days of pending available.	
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**2. Efficiency improvement**

*a. Time saving / improvements in the delivering the above set of services.*

The prime area of differentiation has been the approach adopted for service delivery. The differentiation achieved is broadly classified as

**License Vs Open source:** While the products like e-procurement developed by Government of Maharashtra (IT department) which charges bidder for every tender participation (licensed product), we have developed all solution on open source platform.

**Operation and Maintenance:** All the e-Governance products developed by the Corporation are operated and managed by the regular corporation’s staff. An intensive training programme was undertaken for the selected officials of the department in the operation of the systems.

Regarding the maintenance of the system, special IT expert designations have been created and from the staff of the Corporation, qualified employees have been appointed.

The IT experts are currently undergoing training for C-DAC’s advance software development course. Each IT officer is completely responsible for maintaining and modifying the software as per the requirement. Moreover, the contract signed by the software developer is for a period 5 years, which include the provision of training the Corporation’s officers in the operation and maintenance of the software. With such a forward looking strategy, Corporation has substantially reduced the future O&M cost of the system.

**Approach of service delivery:** While the other Corporations like Baroda Municipal Corporation who purchased licensed copy of for double entry accounting system and Nashik Municipal Corporation have implemented e-Procurement, dashboard for works management solutions, the approach adopted is discrete and concentrates on limited areas. The targeted citizens and services are limited. While PCMC has taken a holistic approach, were the complete database in digitized, all operational transactions are available on web based system, interlinking with the other department software for data sourcing and intelligent reports generation as per the requirements of the senior officers. This approach increases the access to authentic information which enhances the decision making capability of each and every staff. This in-turn will equip the staff to deliver the service efficiently.

### III) ENABLER INDICATORS

#### 1. *People and Resources*

##### a. *Project management & Monitoring – Full time team in place*

The roles played by the Computer Officer and his team in the successful implementation of the project is

- Identification of detail activities for implementation.
- Identification of experienced staff for monitoring and quality control of the project.
- Identification of qualified and experienced project implementation team.
- Preparation of project implementation plan.
- Identification of tech savvy staff from each department for training on project development and maintenance.
- Procurement of Hardware for the system.

##### b. *Achievements of training of internal & external members on the new system*

The roles played by Probity Soft Pvt. Ltd and his team in the successful implementation of the project is

- Identification of system requirements through discussions with the department.
- Setting-up of the coding and testing team for different application.
- Designing system application test models and interfaces for approvals.
- Suggesting the hardware requirement for the system being developed.
- Development of application based on the technical requirements specified by the project management team.

#### 3. *Technology*

The project sustainability and scalability rest on the following parameters:

- **Cost of Operation:** The system is developed on open source platform and there is no license fee charged on transaction. The expenditure for using the payment gateways for property tax and water charges bills is charged directly to the users. The technical manpower required for troubleshooting the system issues are currently provided by the developer and during the contact period the Corporations staff are being trained to maintain the system. In the long run the system operation and maintenance shall be completely managed by in-house experts. The fee charged for providing the service online and the cost saving through the e-Procurement system will balance the cost of operation of the system.

- **Capacity to provide service:** As the no. of service users increases the system needs to be augmented to cater to the demand. Such augmentation shall be required in both system hardware and software. Since the Corporations have its own IT budget and its staff is being trained to completely manage the system operation and maintenance, the project can be scaled to meet its futuristic requirement.
- **Capacity to maintain and modify as per change in requirement:** The availability of qualified staff at all times to maintain the system will always be the concern for sustainability of the system. Since the Corporation is already training the staff in advance level of software development and the software development team (Probity Soft Pvt. Ltd.) has to train the Corporations staff for stand-alone operation and maintenance of the system, the availability of qualifies staff will not be an issue. Moreover since all the software is being developed on open-source platform hiring of software vendor in case of emergency will not be much of an issue.

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